UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

### NOTICE OF ALLOWANCE AND FEE(S) DUE

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10/20/2009

FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022 EXAMINER

LI, AIMEE J

ART UNIT PAPER NUMBER

2183

DATE MAILED: 10/20/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
 09/760,509	01/12/2001	Gilbert Wolrich	10559-0317001/P9678	2157

TITLE OF INVENTION: METHOD AND APPARATUS FOR PROVIDING LARGE REGISTER ADDRESS SPACE WHILE MAXIMIZING

CYCLETIME PERFORMANCE FOR A MULTI-THREADED REGISTER FILE SET

	APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
Ī	nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/20/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correcte maintenance fee notificate	correspondence including below or directed other tions	ng the Patent, advance on nerwise in Block 1, by (a	rders and notification of rands) specifying a new corres	naintenance fees will spondence address; a	I be mailed to the current nd/or (b) indicating a sep	t correspondence address as arate "FEE ADDRESS" for
		ock 1 for any change of address)	Feet pape	(s) Transmittal. This ( ers. Each additional p	certificate cannot be used	or domestic mailings of the for any other accompanying ent or formal drawing, must
20985 FISH & RICHA P.O. BOX 1022 MINNEAPOLIS		/2009	I he Stat	Certify that this es Postal Service wit	icate of Mailing or Trans Fee(s) Transmittal is bein	smission g deposited with the United sts class mail in an envelope above, or being facsimile date indicated below.
						(Depositor's name)
						(Signature)
	_					(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	. A	ATTORNEY DOCKET NO.	CONFIRMATION NO.
		APPARATUS FOR PR I-THREADED REGISTE	Gilbert Wolrich COVIDING LARGE REC ER FILE SET		10559-0317001/P9678 SPACE WHILE MAX	2157 KIMIZING
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE I	FEE TOTAL FEE(S) DUE	E DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/20/2010
EXAM	INER	ART UNIT	CLASS-SUBCLASS	]		
LI, AI	MEE J	2183	712-225000			
<ol> <li>Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</li> <li>Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</li> <li>"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</li> <li>ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON</li> </ol>			(1) the names of up to or agents OR, alternati (2) the name of a singl registered attorney or a 2 registered patent atto listed, no name will be	name of a single firm (having as a member a red attorney or agent) and the names of up to the tered patent attorneys or agents. If no name is no name will be printed.		
(A) NAME OF ASSIG	GNEE		(B) RESIDENCE: (CITY	and STATE OR CO	UNTRY)	locument has been filed for our country Government
4a. The following fee(s): ☐ Issue Fee ☐ Publication Fee (N		4t permitted)	b. Payment of Fee(s): (Plead) A check is enclosed. Payment by credit car	nse first reapply any rd. Form PTO-2038 i	previously paid issue fees s attached. the required fee(s), any de	shown above)
a. Applicant claim	tus (from status indicated s SMALL ENTITY stated Publication Fee (if rec	is. See 37 CFR 1.27.			ENTITY status. See 37 C	
interest as shown by the	records of the United Sta	tes Patent and Trademark	Office.	пе аррпсані, а тедіяк	or agent; of t	he assignee or other party in
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an application. Confident submitting the completed his form and/or suggesti	tiality is governed by 35 d application form to the ions for reducing this but firginia 22313-1450. DC	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th	1.14. This collection is est depending upon the indiverse Chief Information Office	timated to take 12 mi vidual case. Any com er. U.S. Patent and Tr	nutes to complete, includi- ments on the amount of ti ademark Office, U.S. Der	d by the USPTO to process) ng gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/760,509	01/12/2001	Gilbert Wolrich	10559-0317001/P9678	2157	
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FISH & RICHARDSON, PC			LI, AII	MEE J	
P.O. BOX 1022			ART UNIT	PAPER NUMBER	
MINNEAPOLIS, MN 55440-1022			2183		
			DATE MAILED: 10/20/2009		

## **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 473 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 473 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)	
	00/760 500	WOLRICH ET AL.	
Notice of Allowability	09/760,509 <b>Examiner</b>	Art Unit	
	A.NAEE 1 1 1	0400	
	AIMEE J. LI	2183	
The MAILING DATE of this communication appears All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED or other appropriate comm IGHTS. This application is	in this application. If not included nunication will be mailed in due cour	se. <b>THIS</b>
1. 🔀 This communication is responsive to <u>Appeal Briefs 09 Feb</u>	urary 2009 and 29 June 20	<u>009</u> .	
2. The allowed claim(s) is/are <u>1-7, 15-26, 30, 31, 32, 33, 34 re</u>	enumbered as 1-7, 10-13,	<u>16-23, 8, 14, 24, 9, 25, 15 respectiv</u>	<u>ely</u> .
<ul> <li>3. ☐ Acknowledgment is made of a claim for foreign priority unalled All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> <li>2. ☐ Certified copies of the priority documents have</li> </ul>	e been received.		
3. ☐ Copies of the certified copies of the priority do	• • • • • • • • • • • • • • • • • • • •		from the
International Bureau (PCT Rule 17.2(a)).	cuments have been receiv	ed in this hational stage application	nom the
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	IENT of this application.		
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			CE OF
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.		
(a) $\square$ including changes required by the Notice of Draftspers	son's Patent Drawing Revie	ew ( PTO-948) attached	
1)  hereto or 2)  to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment	or in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			k) of
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			the
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	E □ Notice of	nformal Patent Application	
<ol> <li>Induce of References Cited (PTO-092)</li> <li>Induce of References Cited (PTO-</li></ol>		Summary (PTO-413),	
· · · · · · · · · · · · · · · · · · ·	Paper No	o./Mail Date	
3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date	7. 🗌 Examiner'	s Amendment/Comment	
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material		s Statement of Reasons for Allowan	ce
	9.	<u>_</u> .	
/Aimee J Li/			
Primary Examiner, Art Unit 2183			

Application/Control Number: 09/760,509 Page 2

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#### **REASONS FOR ALLOWANCE**

1. The following is an examiner's statement of reasons for allowance: The prior art searched and found have not taught the combination of limitations found in the independent claims. Specifically, the prior art searched and found have not taught, when taken in consideration with the other limitations in the independent claims, taking claim 1 as exemplary, "the register set comprising a plurality of two-ported random access memory devices assembled into banks, the register set comprising two effective read ports and one effective write port, wherein the effective write port comprises write ports of a pair of the two-ported random access memory devices".

- 2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
- 3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AIMEE J. LI whose telephone number is (571)272-4169. The examiner can normally be reached on M-T 7:00am-4:30pm.
- 4. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Art Unit: 2183

5. Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aimee J Li/ Primary Examiner, Art Unit 2183

12 October 2009